CLAIMS

We claim:

1. Method for processing a client session request, comprising the steps of:

negotiating environment parameters for establishing a connection-oriented connection with said client;

inviting said client to submit user variables;

responsive to receiving a user variable requesting a custom confirmation record, sending to said client a confirmation record and custom record data.

2. The method of claim 1, said negotiating, inviting, and sending steps executing within the application layer of a TCP/IP protocol stack.

3. The method of claim 1, further comprising the step responsive to a user variable requesting a confirmation record, sending to said client a confirmation record without said custom record data.

4. The method of claim 1, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

5. The method of claim 1, further comprising the step of appending said custom record data to said confirmation record.

6. The method of claim 1, said request being for a default custom confirmation record, and further comprising the step of sending to said client default data in said custom record data.

7. The method of claim 1, said request being for a defined custom confirmation record, said request including a list of one or more predefined information items, further comprising the step of sending to said client defined data in said custom record data.

8. The method of claim 7, said sending step including executing a customer defined exit program on said list to generate said defined data.

9. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying a device allocated by a host server.

10. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying a terminal or printer device allocated by a host server.

11. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying an associated device linked to a current session by a host.

12. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying a physical location for receiving output.

13. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying system security level and password encryption requirements.

14. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying another device for retrying a rejected request.

15. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying a reason for a failed auto-signon request.

16. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying a reason for denial of session connection request upon system overload and redirection to an alternate time or host.

17. The method of claim 4, further comprising the step of providing in said custom record data indicia identifying custom information for interpretation by said client.

18. A client/server system, comprising:

a custom confirmation record;

a user exit program running on said server;

said client operating in conjunction with said user exit program for requesting said custom confirmation record

19. The system of claim 18, said client being a Telnet client.

20. The system of claim 18, further comprising:

said client being selectively operable for negotiating a send-custom-confirmation-record with a 'yes', 'no' or defined data value; and

said user exit interpret said data value and sending default or defined information back to said client in said custom confirmation record.

21. The system of claim 20, said custom confirmation record containing diagnostic information provided by said server along with custom information provided by said user exit program.

22. The system of claim 21, said custom information being provided by user exit programs executing in said server and said client.

23. A method for operating a client to establish a network connection with a server, comprising the steps of:

negotiating environment parameters for establishing a connection-oriented connection with said server;

said parameters including a request for said server to provide a custom confirmation record; and

responsive to said request, receiving said confirmation record.

24. The method of claim 23, said custom confirmation record including return code, system name, device name and custom data.

25. The method of claim 24, further comprising the steps of:

operating said server to request a custom information record from said client.

26. The method of claim 25, said request comprising an invitation to said client from said server to respond with all environment variables.

27. The method of claim 26, said client responding to said invitation by returning a custom information record as part of said environment variables.

28. The method of claim 27, said client responding to said invitation with a request that said server return to said client a custom confirmation record.

29. The method of claim 28, further the steps of

operating an exit program to interpret the value in said custom information record to selectively return a custom confirmation record response.

30. The method of claim 28, further comprising the steps of specifying in said custom confirmation record a list of custom fields to be returned by said server.

31. The method of claim 28, further comprising the steps of specifying in said custom confirmation record unstructured data for subsequent parsing and processing by said server, an exit program, or an independent job.

32. Method for operating a client to establish a network connection with a server, comprising the steps of:

negotiating environment parameters for establishing a connection-oriented connection with said server;

receiving an invitation to submit user variables;

responsive to sending to said server a user variable requesting a custom confirmation record, receiving from said server a confirmation record and custom record data.

33. The method of claim 32, said negotiating, inviting, and sending steps executing within the application layer of a TCP/IP protocol stack.

34. The method of claim 32, further comprising the step responsive to said invitation to submit user variables, requesting a confirmation record, and responsive thereto receiving from said server a confirmation record without said custom record data.

35. The method of claim 32, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

36. The method of claim 32, further comprising the step of receiving said custom record data appended to said confirmation record.

37. The method of claim 32, said request being for a default custom confirmation record, and further comprising the step of receiving from said server, default data in said custom record data.

38. The method of claim 32, said request being for a defined custom confirmation record, said request including a list of one or more predefined information items, further comprising the step of receiving from said server, client defined data in said custom record data.

39. The method of claim 38, further including the step of providing to said server a customer defined exit program for parsing said list to generate said defined data.

40. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying a device allocated by a host server.

41. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying a terminal or printer device allocated by a host server.

42. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying an associated device linked to a current session by a host.

43. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying a physical location for receiving output.

44. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying system security level and password encryption requirements.

45. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying another device for retrying a rejected request.

46. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying a reason for a failed auto-signon request.

47. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying a reason for denial of session connection request upon system overload and redirection to an alternate time or host.

48. The method of claim 35, further comprising the step of receiving in said custom record data indicia identifying custom information for interpretation by said client.

49. A client system for establishing a network connection with a server, comprising:

a first logic element for negotiating environment parameters for establishing a connection-oriented connection with said server;

said parameters including a request for said server to provide a custom confirmation record; and

a second logic element responsive to said request, for receiving said confirmation record.

50. The system of claim 49, said custom confirmation record including return code, system name, device name and custom data.

51. The system of claim 50, further comprising:

a third logic element for operating said server to request a custom information record from said client.

52. The system of claim 51, said request comprising an invitation to said client from said server to respond with all environment variables.

53. The system of claim 52, said client further comprising a fourth logic element for responding to said invitation by returning a custom information record as part of said environment variables.

54. The system of claim 53, said client further comprising a fifth logic element for responding to said invitation with a request that said server return to said client a custom confirmation record.

55. The system of claim 54, said server further comprising an exit program for interpreting the value in said custom information record to selectively return a custom confirmation record response.

56. The system of claim 54, further comprising a logic element for specifying a list of custom fields to be returned by said server in said custom confirmation record.

57. The system of claim 54, further comprising a logic element for specifying in said custom confirmation record unstructured data for subsequent parsing and processing by said server, an exit program, or an independent job.

58. System for processing a client session request, comprising:

a logic element for negotiating environment parameters for establishing a connection-oriented connection with said client and inviting said client to submit user variables; and

an exit program responsive to receiving a user variable requesting a custom confirmation record for sending to said client a confirmation record and custom record data.

59. The system of claim 58, further comprising a TCP/IP protocol stack including within an application layer said exit program generating said custom record data.

60. The system of claim 58, said logic element further operable responsive to a user variable requesting a confirmation record for sending to said client a confirmation record without said custom record data.

61. The system of claim 58, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

62. The system of claim 58, said logic element further operable for appending said custom record data to said confirmation record.

63. System for operating a client to establish a network connection with a server, comprising:

a first logic element for negotiating environment parameters for establishing a connection-oriented connection with said server and for receiving an invitation to submit user variables;

a second logic element responsive to sending to said server a user variable requesting a custom confirmation

record for receiving from said server a confirmation record and custom record data.

64. The system of claim 63, further comprising a TCP/IP protocol stack including an application layer within which said logic elements execute.

65. The system of claim 63, further comprising the step responsive to said invitation to submit user variables, requesting a confirmation record, and responsive thereto receiving from said server a confirmation record without said custom record data.

66. The system of claim 63, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

67. The system of claim 63, said second logic element further responsive for receiving said custom record data appended to said confirmation record.

68. The system of claim 63, said request being for a default custom confirmation record, and said second logic element further operable for receiving from said server default data in said custom record data.

69. The system of claim 63, said request being for a defined custom confirmation record, said request including a list of one or more predefined information items, said second logic element further operable for receiving from said server client defined data in said custom record data.

70. The system of claim 69, further including a logic element for providing to said server a customer defined exit program for parsing said list to generate said defined data.

71. A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for processing a client session request, said method steps comprising:

negotiating environment parameters for establishing a connection-oriented connection with said client;

inviting said client to submit user variables;

responsive to receiving a user variable requesting a custom confirmation record, sending to said client a confirmation record and custom record data.

72. The program storage device of claim 71, said negotiating, inviting, and sending steps executing within the application layer of a TCP/IP protocol stack.

73. The program storage device of claim 71, said method steps further comprising, responsive to a user variable requesting a confirmation record, sending to said client a confirmation record without said custom record data.

74. The program storage device of claim 71, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

75. The program storage device of claim 71, said method steps further comprising the step of appending said custom record data to said confirmation record.

76. The program storage device of claim 71, said request being for a default custom confirmation record, and said method steps further comprising the step of sending to said client default data in said custom record data.

77. The program storage device of claim 71, said request being for a defined custom confirmation record, said request including a list of one or more predefined information items, and said method steps further comprising the step of sending to said client defined data in said custom record data.

78. The program storage device of claim 77, said sending step including executing a customer defined exit program on said list to generate said defined data.

79. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying a device allocated by a host server.

80. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying a terminal or printer device allocated by a host server.

81. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying an associated device linked to a current session by a host.

82. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying a physical location for receiving output.

83. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying system security level and password encryption requirements.

84. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying another device for retrying a rejected request.

85. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying a reason for a failed auto-signon request.

86. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying a reason for denial of session connection request upon system overload and redirection to an alternate time or host.

87. The program storage device of claim 74, said method steps further comprising the step of providing in said custom record data indicia identifying custom information for interpretation by said client.

88. A program storage device readable by a machine, tangibly embodying a program of instructions executable by a machine to perform method steps for operating a client to establish a network connection with a server, said method steps comprising:

negotiating environment parameters for establishing a

connection-oriented connection with said server;

receiving an invitation to submit user variables;

responsive to sending to said server a user variable requesting a custom confirmation record, receiving from said server a confirmation record and custom record data.

89. The program storage device of claim 88, said negotiating, inviting, and sending steps executing within the application layer of a TCP/IP protocol stack.

90. The program storage device of claim 88, said method steps further comprising the step, responsive to said invitation to submit user variables, of requesting a confirmation record, and responsive thereto receiving from said server a confirmation record without said custom record data.

91. The program storage device of claim 88, said confirmation record including a field defining a pass through data length, said pass through data including said confirmation record and said custom record data.

92. The program storage device of claim 88, said method steps further comprising the step of receiving said custom record data appended to said confirmation record.

93. The program storage device of claim 88, said request being for a default custom confirmation record, and said method steps further comprising the step of receiving from said server default data in said custom record data.

94. The program storage device of claim 88, said request being for a defined custom confirmation record, said request including a list of one or more predefined information items, said method steps further comprising the step of receiving from said server client defined data in said custom record data.

95. The method of claim 94, further including the step of providing to said server a customer defined exit program for parsing said list to generate said defined data.

96. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying a device allocated by a host server.

97. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying a terminal or printer device allocated by a host server.

98. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying an associated device linked to a current session by a host.

99. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying a physical location for receiving output.

100. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying system security level and password encryption requirements.

101. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying another device for retrying a rejected request.

102. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying a reason for a failed auto-signon request.

103. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying a reason for denial of session connection request upon system overload and redirection to an alternate time or host.

104. The program storage device of claim 91, said method steps further comprising the step of receiving in said custom record data indicia identifying custom information for interpretation by said client.

105. A computer program product or computer program element for operating a server in a network according to method steps comprising:

negotiating environment parameters for establishing a connection-oriented connection with a client;

inviting said client to submit user variables;

responsive to receiving a user variable requesting a custom confirmation record, sending to said client a confirmation record and custom record data.

106. A computer program product or computer program element for operating a client in a network according to method steps comprising:

negotiating environment parameters for establishing a connection-oriented connection with said server;

receiving an invitation to submit user variables;

responsive to sending to said server a user variable requesting a custom confirmation record, receiving from

said server a confirmation record and custom record data.